the Maori had then to smooth the surface by rubbing it on a piece of sandstone, usually in a longitudinal manner, as he had no knowledge of a rotatory stone for this purpose.

The methods of hafting the implements are described and evidence is adduced to show that, contrary to what was formerly believed, the Maori did use tools helved as axes, but they were not nearly so numerous or commonly used as were tools hafted and used as adzes.

All the available information about nephrite and the tools made from it is summarised by Mr. Best. Many legends have grown up in connection with this precious stone, for this there has been ample time, since "Polynesians, or a mixed people, must have been settled in New Zealand for at least one thousand years, and possibly for a longer period. It is also highly probable that the old-time people of these isles, who here flourished long before the immigration of *circa* 1350, were acquainted with nephrite of the South Island, and also that they worked it to some extent." The memoir is illustrated by fifty-one plates which leave nothing to be desired.

A. C. HADDON.

NOTES.

THE annual visitation of the Royal Observatory, Greenwich, will be held on Saturday, June 6.

THE Faraday lecture of the Chemical Society will be delivered by Prof. Svante Arrhenius in the theatre of the Royal Institution on Monday, May 25, upon the subject of "Electrolytic Dissociation."

DR. ROBERT CHODAT and Dr. Richard Wettstein, Ritter von Westersheim, have been elected foreign members of the Linnean Society. The council of the society has decided to award the Linnean medal at the forth coming anniversary meeting on May 25 to Prof. Otto Bütschli, of Heidelberg.

A REUTER message from Ottawa states that an Order in Council has been passed setting aside as a national park an area of ninety-five square miles situated within the railway belt of British Columbia, in the vicinity of Mount Revelstoke, on the line of the Canadian Pacific Railway. It will be known as the Revelstoke National Park.

THE death is announced, on May 15, of Miss Ida Freund, late staff lecturer at Newnham College, and author of several papers on chemical subjects, as well as of a valuable work published in 1904, entitled "The Study of Chemical Composition: an Account of its Method and Historical Development."

DR. J. C. KONINGSBERGER, director of the Botanic Gardens—'s Lands Plantentuin—Buitenzorg, Java, informs us that the new laboratory for foreign scientific visitors is now open. The laboratory is consecrated to the memory of his predecessor, the late Prof. Melchior Treub, and consequently bears the name "Treub Laboratorium." We are asked to announce that, as hitherto, the director and staff of the gardens welcome visitors, and will do all that is in their power to make a scientific voyage to Java and a stay in Buitenzorg as profitable as possible.

THE annual meeting of the British Science Guild will be held at the Mansion House to-morrow, May 22, at 4 p.m., the Right Hon. the Lord Mayor presiding. Sir Ronald Ross, K.C.B., will deliver an address, and other speakers will be the president of the guild (the Right Hon. Sir William Mather), Sir Boverton Redwood, Bart., the Right Hon. Lord Blyth, Sir William Beale, Bart., Mr. C. Bathurst, M.P., Major O'Meara, C.M.G., Mr. Alexander Siemens, and Mr. Carmichael Thomas. The dinner of the guild will be held on the same date, at 7 p.m., at the Trocadero Restaurant, under the chairmanship of Sir William Mather.

THE President of the Board of Agriculture and Fisheries has appointed a Departmental Committee to consider and report upon the effect of the present arrangements for the sale of the small-scale maps of the Ordnance Survey. The Committee consists of Sir Sydney Olivier, K.C.M.G., Permanent Secretary of the Board of Agriculture, chairman; Mr. F. Atterbury, C.B., Controller of his Majesty's Stationery Office; and Colonel C. F. Close, C.M.G., Director-General of the Ordnance Survey. Mr. J. L. Bryan, of the Board of Agriculture, will act as secretary to the Committee.

THE young of the grey seal (*Halichoerus grypus*) are stated to differ from those of all other European seals by their inability to swim until several weeks after birth; and as they are born above high-water mark on rocks and skerries in the open sea, they are peculiarly liable to destruction by those acquainted with the haunts and habits of the species. Despite the small value of the pelt of the pup and of the oil of the parent, expeditions have of late years been made to the breeding-places of these seals on the British coasts, with the result that the species is in jeopardy of imminent local extermination. To put matters on a better footing a Bill has been introduced in the House of Lords to enact an annual close time for these seals from October 1 to December 15; it recently passed the third reading in the Upper House.

AT the beginning of this year the *Biologische Versuchsanstalt* at Vienna passed into the possession of the Imperial Academy of Sciences. The institution is for the experimental investigation of organisms, especially experimental morphology and developmental physiology; also of comparative physiology and the borderlands of biophysics and biochemistry. The Academy of Sciences has appointed a committee of trustees for the institution. A limited number of tables is exempt from fees, and may be awarded by the director of the Anstalt or directors of its departments. The Austrian Ministry of Education has reserved four tables of which as a rule one is to be awarded in every department. Applications for research tables may be addressed to the director of the Anstalt, or to one of the following directors of departments:—*Botany,* W. Figdor and L. v. Portheim; *Physical Chemistry,* W. Pauli (until December 31, 1914); *Physiology,* E. Steinäch; *Zoology,* H. Przibram.

THE annual meeting of the Société Helvétique des Sciences naturelles is to be held at Berne on August

31–September 3 next. Prof. E. Fischer is the president for the year, and Dr. H. Rothenbühler is the secretary of the committee of management. The following addresses to general meetings of the society have been announced:—Dr. Bluntschli, of Zürich, on the biology and ontogeny of the primates of the New World; Prof. E. Hugi, of Berne, on the geology of the Gaster range and the Lötschberg tunnel; Prof. Kohlschütter, of Berne, on physico-chemical factors in the origin of natural forms; Prof. Noelting, of Mulhouse, on the synthesis of colouring matters; and Prof. H. Sahli, of Berne, on the influence of natural science on modern medicine. The Swiss Mathematical, Physical, Chemical, Geological, Botanical, and Zoological Societies will also hold their annual meetings at Berne on September 2. Members desirous of presenting papers at any of the meetings of sections should communicate with Prof. Fischer, Kirschenfeldstrasse, 14, Berne, before July 1.

On Monday last a Committee of the House of Lords threw out a Bill promoted by the Glasgow Corporation under which they sought powers to make an electric tramway with a double line of rails along University Avenue, which for nearly half a mile forms the northern boundary of Glasgow University and of the Infirmary. The University opposed the Bill on the ground of magnetic disturbance and vibration, which would adversely affect the physical, botanical, and biological laboratories. Technical evidence was given in support of the opposition by Profs. Gray, Kerr, and Bower, of Glasgow University, Prof. Nuttall, of Cambridge, and by Mr. C. V. Boys and Mr. Sellon. This decision is one of the first importance for the protection of our universities from encroachments upon their amenities and the quiet which they have enjoyed; it is necessary for their welfare, and will establish a useful precedent when town councillors and other promoters are trying to force their schemes regardless of the injury which they would do.

In the issue of the *Revue générale des Sciences* for December 30, 1909, an article by M. Ernest Solvay was published dealing with "Physical Chemistry and Psychology." In that article M. Solvay propounded ten questions which opened up numerous researches; and to encourage investigation in these directions he announced that he would devote 2000*l*. to the award of prizes for work designed to answer his questions. The theses had to be sent in by January 1, 1914, to the Institut Solvay de Physiologie in Brussels. The awards were made by a commission consisting of Prof. L. Fredericq, of Liége, Prof. J. Verschaffelt, of Brussels, and Prof. O. Dony-Hénault, of Mons, and were announced in the issue of our contemporary for April 30. The prizes were awarded as follows:—To Prof. G. Bredig, of the Technical High School, Karlsruhe, for his researches on catalysis; to M. G. De Meyer, of the Institut Solvay, for his work on muscular action; and to M. J. Boselli, of Paris, for his research on the speed of reaction in heterogeneous systems.

The plans for the Meteorological Conference which is to be held in Edinburgh in September next are taking definite shape. A strong general committee with seventy-six members has been formed. The lamented death of Sir John Murray has left the office of president vacant. The other officers of the conference are the following: *Vice-presidents*: C. J. P. Cave, president of the Royal Meteorological Society; J. Mackay Bernard, of Dunsinnan, president of the Scottish Meteorological Society; Major-General Ruck, president of the Aeronautical Society; Dr. W. N. Shaw, director of the Meteorological Office; Dr. H. R. Mill, director of the British Rainfall Organisation; Sir William Turner, principal of Edinburgh University; the Right Hon. Robert K. Inches, Lord Provost of Edinburgh. *Treasurer*: Captain H. G. Lyons. *Hon. Secretary:* F. J. W. Whipple, Meteorological Office, South Kensington, S.W. *Convener*, Edinburgh committee: Dr. E. M. Wedderburn, 2 Glenfinlas Street, Edinburgh. The programme of the conference, which will open on Tuesday, September 8, includes general discussions on meteorological questions, such as the use of pilot balloons for forecasters and aeronauts, wireless telegraphy in relation to forecasting, the electricity of thunderstorms, and evaporation and rainfall, as well as two evening lectures, which will probably be open to the public, a reception to which the members have been invited by the Lord Provost of Edinburgh, demonstrations with sounding balloons, and an excursion to Eskdale Observatory. Further particulars may be obtained from the hon. secretary, at the Meteorological Office, South Kensington.

In the University of California's Publications on American Archæology and Ethnology, vol. x., No. 6, Mr. P. E. Goddard contributes notes on the Chilula tribe of Indians, who up to recent times inhabited the banks of Redwood Creek, Humboldt County, California. They have now ceased to exist as a separate people, and if a full account of the tribe were possible its chief interest would be found in the deviations from the Hupa type of culture due to environmental differences, and certain transitional features. A curious discovery is that of a pond round which the girls during their adolescence ceremonies used to run in a direction contrary to the course of the sun. If the girl was able to run once round without drawing breath it was assumed that she would be a good basket-maker.

In the April number of *Bedrock* Prof. G. Elliot Smith replies to certain criticisms tending to belittle the morphological importance of the Piltdown skull (*Eoanthropus dawsoni*). After remarking that, in spite of his relatively high brain-development, his face still retained many ape-like traits, the author goes on to observe that "the Piltdown man is the nearest approximation that has yet been discovered to the direct ancestor of the genus Homo, and all of its many varieties that made their appearance in Pleistocene and more recent times." In a later passage he adds that "it must be regarded as definitely settled, with as high a degree of probability as any question of phylogeny can be said to be settled, that the genus Eoanthropus represents the immediate ancestor of the genus Homo."

IN *Man* for May Mr. Eldon Best discusses the question of the peopling of New Zealand. He thinks it is going too far to speak of two distinct races in the island; but we have certainly the blending of two races: the fair-skinned Polynesian, with good features, and the swart, thick-lipped, flat-nosed Melanesian type. The former has hair with a slight wave in it; the hair of the latter, if allowed to grow, has the frizzy and bushy appearance of that of the Fijians. Between them is an intermediate type, the result of blending. Besides these, again, in the Urukehu strain we find a fair-haired, light-skinned type, the origin of which is still a mystery. Cannibalism, he supposes, was by no means a common custom in the Society group, whence the Maori came to the island; but it was well established in Fiji, and was probably introduced by the Maruiwi—a folk with pronounced Fijian affinities—and was thus acquired by the Polynesian Maori, or rather, was inherited by the mixed descendants of these two peoples.

THE current number of the *Quarterly Review* contains an interesting account of the family of Sadi Carnot from the pen of Mr. James Carlill. Sadi himself was a captain of engineers, and died in 1832 when only thirty-six, having published his "Reflexions sur la puissance motrice du feu" in 1824. He was the eldest son of General Lazare Carnot, the "organiser of victory" of the first Republic, and member of the Committee of Public Safety. His younger brother Hippolyte became Minister of Education in, and his nephew Sadi President of, the French Republic (1887). His uncle Feulint was almost as distinguished a soldier as his father, and three other uncles became judges, one of the Cour de Cassation. His grandfather was a distinguished notary of Nolay in Burgundy, and his grandmother a woman of great beauty. Families of ten, twelve, or fourteen members are common in his pedigree. According to the author, the family mind, which enabled the Carnots for a century and a half to supply men to fill the highest offices in the State, was the normal brain encouraged from childhood to take an active interest in everything, and invigorated by constant use.

THE fishes collected during the Duke of Mecklenburg's first expedition to Central Africa are described by Messrs. P. Pappenheim and G. A. Boulenger in vol. v., Zoologie iii., Lief. 2, of the *Wissenschaftliche Ergebnisse* of the expedition, published at Leipzig by Klinkhardt and Biermann. A new genus (Schubotzia) of cichlids and a number of new species of various groups are named. The same publishers are also issuing the scientific results of the Duke's second expedition ("Ergebnisse der Zweiten Deutschen Zentral-Africa Expedition, 1910–11," etc., etc.), of which we have received Lief. 2 of the zoological section of the first volume, dealing with the copepod and cladocerotine crustaceans.

THE whole of vol. xxv. of *Anales del Museo Nacional de Historia Natural de Buenos Aires* is devoted to the mammalian Tertiary faunas of the "Araucanian" formations of Argentina, as specially represented by those of Monte Hermoso and the Rio Negro, the monograph being illustrated by thirty-one plates and ninety-two text-figures. The author, Señor Cayetano Rovereto, records a very large number of species, some of which are described as new, and likewise names several new genera. Most, at any rate, of the forms belong to types already familiar through the works of Ameghino, Dr. W. B. Scott, and others, and it may be a question whether at least some of the generic types described as new are not based on trivial characters or on those due to immaturity.

OF late years it has been very generally accepted both in this country and on the Continent, that the name "auerochs," or "aurochs," belongs of right to the extinct wild ox, or ur (*Bos taurus, primigenius*), and not to the bison (*B. bonasus*). This, we believe, was first definitely pointed out in this country on p. 14 of a paper on the zoology of ancient Europe read by the late Prof. A. Newton before the Cambridge Philosophical Society in 1862, and published later on in the same year by Messrs. Macmillan in pamphlet form. The writer's actual words are that the ur or urus "has been so very commonly confounded by writers with the zubr, or European bison (*B. bonasus*)—the aurochs, as it is commonly, although erroneously, called in France and England, that it is not easy to make out anything with certainty with regard to it." A similar view, adopted by others of his countrymen, was subsequently expressed in Germany by the late Prof. A. Nehring, who considered that the name auerochs was gradually transferred centuries ago to the wild ox, as the latter became exterminated. Recently Dr. B. Szalay, of N.-Szeben-Hermanstadt, in an article published in vol. vi. of *Zoologische Annalen* (p. 54), controverts this view, and maintains that the term auerochs properly belongs to the bison or zubr. To discuss the merits of the question in this place is impossible, but we may quote the legends to Herberstein's sixteenth-century pictures of the wild ox and the bison, which are respectively as follows:—"Ich bin der Urus welchen die Polen Thur nennen, die Deutschen Auerox, die Nichtkenner Bison," and "Ich bin der Bison, welchen die Polen Subr nennen, die Deutschen Wysent, die Nichtkenner Urochs." Again, we have the statement by Herberstein, as summarised by Prof. A. Mertens (*Abh. Mus. Magdeburg*, vol. i., p. 7, 1906), "dass der Ur, der dort mit einheimischen Namen Thur genannt wird, bei den Deutschen Auerochs heisst."

ATTENTION was directed to the interesting excursions of the *Oberrheinischer geologischer Verein* in NATURE of May 30, 1912 (vol. lxxxix., p. 328). The *Jahresbericht* of the society for March, 1914, gives the programme of an April visit to the Vorarlberg area. The same number contains a paper on the origin of the Black Forest and the Vosges, by Paul Kessler, which will be welcomed on account of its systematic treatment of a long series of events. The thirteen sections, illustrating the region now occupied by the trough-valley of the Rhine, from the close of Devonian times to the present day, are worthy of reproduction as diagrams for class-instruction. The most mountainous condition of the region, when it resembled the present Alpine chain, is shown as resulting from the Armorican folding. Immense intrusions of igneous rocks then took place, and some of the gneisses of the Vosges and the Black Forest are now recognised as granites of Carboniferous age. While the great lowering of the Rhine-trough by down-faulting dates from Middle Oligocene times, and while this was emphasised by the Miocene uplift of its flanking walls, it is interesting to reflect that the Rhine itself played no part in the modification of the valley until it flowed for the first time northward at the opening of the Glacial epoch.

Since the description by Prof. Malladra, in May, 1912, of the existence of a practicable path by which the bottom of the Vesuvian crater can be reached, several observers have availed themselves of the opportunity of making investigations concerning volcanic action under these unique conditions. In the *Geologische Rundschau* (Band v., Heft 2, 1914) a very interesting account of a visit to the crater is given by Mr. Max Storz, of Munich. Among the valuable results published as the outcome of this visit, we may direct attention to the temperature observations, made by means of metallic wires with different melting points, and to the determination of the acids and bases present in the emanations. The acids found were hydrochloric and sulphurous-acid gases, and indications of the following metals were detected—lead, copper, calcium, magnesium, potassium, and sodium. Useful plans of the crater and of the bocca at its bottom are given, together with photographs which are similar in every respect to those obtained by Mr. Burlingham, three of which appeared in Nature of February 5.

The Californian earthquake of 1906 originated in a movement along the San Andreas fault-rift extending over a distance of 290 miles. Since that year three slight earthquakes have been traced to slips along the same fault. The first, on September 12, 1912, occurred near the south end of San Francisco Bay; the second, on October 25, 1913, to the north-west of Berkeley; the third, on January 23, 1914, in an intermediate position close to San Bruno. The epicentre of the last was determined by Mr. E. F. Davis (Bull. Seis. Soc. America, vol. iv., pp. 25–28) by means of Omori's formula for local shocks from the duration of the preliminary tremors at the Lick, Santa Clara, and Berkeley Observatories.

The report for 1913 of the Stonyhurst College Observatory (Lancs.) has been received from Father Sidgreaves, and contains *inter alia* mean and extreme meteorological values at that important station for the last sixty-six years. The observatory has recently severed its principal connection with the Meteorological Office (as explained in the last annual report of the meteorological committee), but it still furnishes the latter body with weekly reports; the automatic recorders remain at Stonyhurst, and their continuous registrations are uninterrupted.

The yearly report for 1913 of the *Deutsche Seewarte* (Hamburg) bears witness to the great activity of that useful institution with regard especially to (1) maritime meteorology, (2) weather telegraphy, and, generally speaking, to all matters connected with the welfare of the seafaring community. Much attention is given to the proper installation of the mariner's compass, and to the application of the theory of magnetism to navigation; these matters also engaged the earnest attention of the late Dr. v. Neumayer. During the year the number of complete sets of observations received from observers at sea exceeded three-quarters of a million. These are utilised in the preparation of monthly meteorological charts, sailing directions, and daily synoptic weather charts of the North Atlantic. The daily report has undergone several recent improvements, and it now includes small charts showing separately the changes of air-pressure during the preceding day and night by lines of equal values of these changes (isallobars); these values are fully discussed by Dr. N. Ekholm in No. lxiv. of the publications of the international council for the study of the sea (Nature, September 18, 1913).

Boltzmann's formula for entropy considered in relation to the theory of probability has recently been made the basis of many of our modern radiation theories; but objections have been raised by Einstein and others, in particular to the validity of the formula when applied to systems other than isolated systems the energy of which is constant. A short note on this question is published by Dr. Karl F. Herzfeld in the Vienna *Sitzungsberichte* for 1913 (recently received), in which the author confirms the more general formula according to which the entropy in any state is proportional to the logarithm of the number of possible cases plus a constant, but the value of this constant is not definite, as it was in the usual Boltzmann formula.

A short time ago Mr. Jenkins described (*Philosophical Magazine,* vol. xxvi., p. 752) a method devised by Prof. Hicks for determining a magnetic field, in particular the horizontal component of the earth's field, by a method which reduced the measurement to that of an electric current. In the case of the earth's field a solenoid through which a measured current flows is used to reverse that field. The state of the joint field is judged by the time of oscillation of a small magnet at the centre of the solenoid. In the March number of *Terrestrial Magnetism,* Prof. Schuster describes a similar method which he has had tested at the National Physical Laboratory. It seems probable that when the coil is wound with the degree of accuracy used in current-measuring instruments, the accuracy of a determination will be at least as great as with the Kew magnetometer, and the time required will be five minutes instead of an hour.

An electrical sterilisation process has been in successful operation at one of the milk depôts of the Liverpool City Corporation for the past six months, and a report on this process drawn up by the city bacteriologist, Prof. Beattie, was presented last month to the Health Committee of the City Corporation. The process depends upon the use of an alternating current of high potential for destroying, by shock, the bacteria contained in the milk. The sterilising apparatus consists of a long tube with copper electrodes inserted in tube-shaped depressions at suitable points, the milk being passed continuously through this tube, from a raised tank, at a predetermined rate of flow. The current used varies from 2 to 3 amperes at an E.M.F. of 3900 to 4200 volts, and each unit quantity of milk is exposed to the action of this current for such a brief period of time, that no heating effects are produced. Details of the bacteriological results are given in the report, from which it is seen that *B. coli* and the ordinary milk-souring bacteria have been invariably absent from the electrically-treated milk, and that the average percentage reduction in the number of total bacteria, over a period of fifteen days' operation of the plant, was 99·93 per cent. The electrical sterilising apparatus in use at the Earle Road Milk Depôt of the Liverpool Corporation has a capacity of 125 gallons of milk a day, and this quantity is distributed in 3000 bottles. The question of extending the plant is now being considered.

A PAPER on recording pyrometers, read by Mr. C. R. Darling at a meeting of the Faraday Society on April 22, was accompanied by a full display of the most recent types of instruments. The marked improvement which has been effected in the accuracy of these instruments was attributed by the author, and by several speakers in the subsequent discussion, to the admirable work of the National Physical Laboratory as an impartial standardising agency. Some recent advances include (1) the introduction of electric power to operate the pyrometers, either by means of relay-circuits or in place of clockwork, in such a way that the automatic control of large technical furnaces may easily be provided for; (2) arrangements whereby the same instrument may be used either with a resistance thermometer or with thermal couples; (3) automatic switches with the help of which the records from several furnaces may be recorded by the same machine.

THE Chemical Society's journal for April contains two papers by Dr. Pickard and Mr. Kenyon on the dependence of rotatory power on chemical constitution. The first paper, recalling the monographs of Sir William Perkin on magnetic rotatory power, contains a description of no fewer than seventy-three optically-active esters of the fatty series. Unlike the alcohols from which they are derived, which exhibit the simplest type of rotatory dispersion at all temperatures, the esters show marked deviations from the simple law when the temperature is raised; in certain solvents they even exhibit anomalous rotatory dispersion. The second paper includes a description of the optical properties of naphthyl methyl carbinol $C_{10}H_7.CH(OH).CH_3$. This substance obeys the simple dispersion law at temperatures above 160°, but shows anomalous rotatory dispersion in the superfused condition at temperatures below about 10°. It is suggested that the anomalous dispersion is caused by the actual presence in the superfused liquid of two of the hypothetical varieties of the naphthalene nucleus which have long been postulated by organic chemists.

THE transportation problem in Canada, and Montreal Harbour, were discussed in a paper read at the Institution of Civil Engineers on April 7 by Mr. F. W. Cowie. It appears that the farmer receives for his wheat 67 per cent. of the price paid by the consumer; the remaining 33 per cent. represents the cost of transportation, handling, and selling profits. It is important that the latter percentage should be reduced to the lowest possible figure, so that the farmer may receive the full due for his toil, and the cost of living in Great Britain may not be unduly enhanced. Montreal Harbour handled sixty million bushels of grain in 1913, and nearly a hundred million bushels of Canadian grain were shipped in the same year through Buffalo in the United States. The loss to Canadian transportation and selling organisations by reason of the latter shipments amounts to about 18,000,000 dollars. The magnificent railway systems between New York and Buffalo are the most powerful rivals of the "all Canadian" routes. Great efforts are being put forth by the Canadian Government and others interested to improve facilities and render available Canadian routes. The author is of the opinion that the advantages for future transportation should lie with the St. Lawrence route. It is believed that improvements for the storage and handling of grain in the ports of Great Britain are not advancing in measure equal to the Canadian ports.

SIX new volumes have been added to "The People's Books," which Messrs. T. C. and E. C. Jack are publishing at sixpence net each. The additions fully maintain the high standard of this excellent series, which is bringing within the reach of all readers the results of modern studies in many branches of human knowledge. Particular attention may be directed to Dr. W. E. Carnegie Dickson's little book on bacteriology, and Mr. Ford Fairford's on Canada. Dr. Dickson, in the sub-title to his volume, "Man's Microbe Friends and Foes," sufficiently describes the point of view from which he has written. He gives a brief historical summary of the growth of the science, explains the relation between health and disease, describes some of the commoner organisms which produce disease, and explains the importance of bacteria in the arts and industries. Mr. Fairford's book should prove of service to students of commercial geography, and interest general readers in an important part of the Empire.

OUR ASTRONOMICAL COLUMN.

A NEW COMET.—A Kiel telegram, dated May 17, reports the discovery of a new comet, stated to be of the fourth magnitude, by Zlaitinsky. On May 15 the comet was situated close to η Persei, while on the following day it was recorded as being half a degree north of α Persei.

A further telegram from Kiel communicates an observation by Prof. Schorr. On May 16, at 11h. 12·9m. Bergedorf mean time, the comet was of the 4th magnitude, and its position was R.A. 3h. 17m. 37s., declination $+49^\circ 51' 7''$.

TELESCOPIC METEORS.—One of the interesting contributions to the *Observatory* for May is an account by Mr. W. F. Denning of observations of telescopic meteors. Thirty years ago Mr. Denning directed attention to the importance of making combined ob-